			CONTRACT ID CODE	PA	GE OF PAGES
AMENDMENT OF SOLICITATIO		NTRACT		1	9
2. AMENDMENT/MODIFICATION NO. 76	3. EFFECTIVE DATE See Block 16C	4. REQUISIT	ION/PURCHASE REQ. NO.	5. PRC	DJECT NO. (If applicable)
6. ISSUED BY CODE		7. ADMINIST	ERED BY (If other than Item 6)	COD	E
John F. Kennedy Space Center Procurement Office – ODIN – Kennedy Space Center, FL 32	OP-OS-ODIN				
8. NAME AND ADDRESS OF CONTRACTOR	No., street, county, State, and Zip Co.	de) (x)	9A. AMENDMENT OF SOLIC	ITATION	NO.
			9B. DATED (SEE ITEM 11)		
OAO Corporation					
7375 Executive Place			10A. MODIFICATION OF COI	NTRACT/	ORDER NO.
Seabrook, MD 20706-2278			NAS5-98144/N	NNK0	50A12D
			10B. DATED (SEE ITEM 13)		
CODE	ACILITY CODE		December 1, 200	04	
11. THIS ITEM ONLY APPLIES TO AMENDME	NTS OF SOLICITATIONS				
The above numbered solicitation is amend Offers must acknowledge receipt of this amendr (a) By completing Items 8 and 15, and returning By separate letter or telegram which includes a THE PLACE DESIGNATED FOR THE RECEIP virtue of this amendment you desire to change a to the solicitation and this amendment, and is re 12. ACCOUNTING AND APPROPRIATION D	nent prior to the hour and date specific copies of the amendment; (b) By eference to the solicitation and amend T OF OFFERS PRIOR TO THE HOUF or offer already submitted, such chang seived prior to the opening hour and di	ed in the solicitation of acknowledging of the ackn	on or as amended, by one of the f receipt of this amendment on eac FAILURE OF YOUR ACKNOWLE ECIFIED MAY RESULT IN REJE	h copy of EDGEMEN CTION O	the offer submitted; or (c) NT TO BE RECEIVED AT F YOUR OFFER. If by
	TIONS OF CONTRACTO/ORDERS II	THODIEIEG TUE	CONTRACT/ORDER NO. 40 P	FOODING	D. II. ITEM 44
13. THIS ITEM APPLIES ONLY TO MODIFICA A. THIS CHANGE ORDER IS ISSUEI NO. IN ITEM 10A.					
B. THE ABOVE NUMBERED CONTR appropriation date, etc.) SET FORTH I				s changes	in paying office,
Terms and Conditions	lause C.7 Technology R Commercial Items, (c) C	efreshment		ause 52	2.212-4 Contract
D. OTHER (Specify type of modification	n and authority)				
E. IMPORTANT: Contractor [] is not,	[X] is required to sign this do	cument and re	turn 1 copies to the	issuina (office
14. DESCRIPTION OF AMENDMENT/MODIFIC					
Stennis Space Center	ODIN SERV	ICES	,		
Technology Infrastructures: Inc Process	orporation of 6 Infrastru	cture Upgra	ades Previously Appro	oved U	tilizing Fast Trac
Change in Delivery Order Price	\$58,903.75 (INCREASI	≣)			
Except as provided herein, all terms and condition					
15A. NAME AND TITLE OF SIGNER (Type or) Martha E. Knox	rint)	16A. NAME A Gloria I	ND TITLE OF CONTRACTING O	FFICER (Type or print)
Contracts Manager			cting Officer		
15B CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED	STATES OF AMERICA		16C. DATE SIGNED
Manth knn	6/27/01	BY Pla	- Oranh		6/28/06
(Signature of person authorized to sign) NSN 7540-01-152-8070	30-105	(Signature of C	Contracting Officer) STANDA	RD FOR	RM 30 (Rev. 10-83)

PREVIOUS EDITION UNUSABLE

Prescribed by GSA FAR (48 CFR) 53.243

1. In accordance with Master Contract NAS5-98144, C.7, Technology Infusion (Infrastructure), the infusion services referenced below are hereby incorporated into this Delivery Order at a fixed price of \$58,903.75.

FT Approval Date	SWR/Description		Amount
5/23/2006	UM1C 2006 00 New VLAN on MSCI network for Jacobs/Sverdrup in rooms 142 thru 145 in B1210	\$	650.42
5/23/2006	DB00 0605 00 Install Cat5e wiring between equipment racks in Room 308 of B3203 for NDBC; for Ethernet cabling cleanup behind existing equipment racks	\$	10,209.17
5/23/2006	KTR4 6TRK 00 Install new cable to replace cable damaged by Hurricane Katrina from B4010 to B3220.	\$	15,669.59
6/8/2006	NJ10 6FAQ 00 Revision 1 Remove existing wiring that was damaged by Katrina and install new Cat5e and Cat3 and fiber to support NAVO on 3rd floor of B8100. Install (3) Cat5e and Cat3 jack locations in B2406.	\$	24,675.18
6/13/2006	P203 6111 00 Install Cat6 and Cat3 wiring in room S180A and S180B (to support networks and telephones in converted to office space)	\$	4,767.09
6/15/2006	CC00 2006 03 Install (1) Cat5e wire and jack outside of room 128 in B1002 and install (1) multimode 4-fiber fanout cable from room 194H to room S180HD in B1100, in support of Keesler Federal Credit union network technicians installing an ATM	\$	2,932.30
	TOTAL	\$	58,903.75

2. SWR UM1C 2006 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), for the following: to install a new VLAN on the MSCI network; to install one VPN in building 1210; to update all databases; and to update drawings. This work will include wire to the physical connections and the link to the Internet, as outlined in OAO proposal dated April 13, 2006.

a. The contractor shall be responsible for performance of the following tasks:

OAO will provide the following services:

- (1) Create a new VLAN on the MSCI network for Jacobs/Sverdrup
- (2) Install one VPN in building 1210 for Jacobs/Sverdrup
- (3) Update all Databases
- (4) Update drawings
- b. No material required for this effort.
- c. Schedule: The completion of this effort shall be 2 weeks after receipt of Fast Track approval (May 23, 2006).

3. SWR DB00 0605 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), to install Cat5e wiring between equipment racks for subsequent effort, to clean up Ethernet cabling from behind existing equipment racks in room 308 of B3203; as outlined in OAO proposal dated April 12, 2006. This work will include testing, labeling, and configuration documentation (red line drawings).

a. The contractor shall be responsible for performance of the following tasks:

OAO will provide the following service:

BOE-TEL will work:

- (1) Install (1) 19" x 84" black equipment rack to take the place of the 19" x 72" aluminum equipment rack.
- (2) Install (2) black double sided vertical troughs on the equipment rack installed in item (1) above.
- (3) Install black Flextray across the top of all the cabinets to hole the Cat5e wiring.
- (4) Install (6) 48-port Cat5e patch panels in equipment rack 1. Four will be used to connect rack 2 thru rack 5 back to rack 1. The other (2) will be used for spares.
- (5) Install (1) cable management panel on the top and (1) on the bottom of each Cat5e patch panel in each rack.
- (6) Install 48 Cat5e wires from rack 1 to rack 2 thru rack 4 and terminate on a 48-port Cat5e patch panel in each cabinet.
- (7) Test and label Cat5e wiring at all patch panels.

The materials to be provided in conjunction with the above service are as follows:

BOE-TEL will purchase:

- (1) 6,000 feet of Uniprise Cat5e wiring (CM-0424CMF-5U-09)
- (2) 50 each Velcro Ties
- (3) 15 each cable management panels (219824) black
- (4) 10 each Uniprise Cat5e patch panels (279873) black
- (5) 4 each Flextray Z bracket (206654) black
- (6) 2 each double sided vertical trough (174142) black
- (7) 2 each Flextray 4"x4"x10" (221311) black
- (8) 1 each 19" x 84" aluminum equipment rack (167074) black

c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (May 23, 2006).

4. SWR KTR4 6TRK 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install new cable to replace cable damaged by Hurricane Katrina from B4010 out to B3220, as outlined in OAO proposal dated May 2, 2006. This work shall include testing, labeling, and configuration documentation (red line drawings).

a. The contractor shall be responsible for performance of the following tasks:

OAO will provide the following service:

BOE-TEL will work:

- (1) Install (1) 25-pair protector in room 117 of B4010 and ground to an approved ground.
- (2) Install (1) 25-pair protector in B3220 and ground to an approved ground.
- (3) Core drill the hand hole so that 4" pipe can be placed into it.
- (4) Bore Propellant Boulevard from handhole across from B3220 and place 4" pipe under Propellant Boulevard so that cable can be placed.
- (5) Install (1) 25-pair copper cable thru existing ductbank from room 117 in B4010 to the last hand hole and thru the new 4" pipe that was put under Propellant Boulevard in item (3) above.
- (6) Make 25-pair splice in B4010 and B3220 to the 25-protectors installed in item (1) and (2) above.
- (7) Test and label cable at both ends.
- (8) Remove damaged cable once new cable is cutover by ODIN.

ODIN will work:

(1) Cutover phones at B3220 to new cable.

The materials to be provided in conjunction with the above service are as follows:

- (1) 2650 feet of 25-pair filled copper cable (E-002524DFC)
- (2) 260 feet of 4" pipe for bore under Propellant Boulevard
- (3) 260 feet bore across Propellant Boulevard
- (4) 25 each Circa protector modules 4B1E (220870)
- (5) 25 each Circa protector modules 3B1E (215690)
- (6) 10 feet of #6 ground wire
- (7) 2 each Commscope 489A25-pair protector (195420)
- (8) 1 pack Premier black cable ties (739308)
- c. Schedule: The completion of this effort shall be 12 weeks after receipt of Fast Track approval (May 23, 2006).

5. SWR NJ10 6FAQ 00 Revision 1

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), necessary to remove existing wiring that was damaged by Katrina and install new Cat5e and Cat3 and fiber on the 3rd floor of B8100, and to install (3) Cat5e and Cat3 jack locations in B2406, as outlined in

OAO proposal dated March 8, 2006. This work shall include testing, labeling, and configuration documentation (red line drawings).

a. The contractor shall be responsible for performance of the following tasks:

OAO will provide the following service:

B8100:

- (1) Remove all old wiring prior to installing new wiring on the 3rd floor.
- (2) Hang (2) wall mount equipment cabinet in room 305 area next to high bay. One is to be used for scientific and one to be used for NMCI.
- (3) Relocated existing singlemode and multimode fiber cables over to new cabinets.
- (4) Install (1) new 4-strand singlemode fiber cable from room 101 up to room 305 to be used to connect one of the network switches.
- (5) Terminate fiber into ST connectors on all (3) fiber cables.
- (6) Install (2) Cat5e and (1) Cat3 wires to (25) scientific locations on the 3rd floor.
- (7) Install (2) Cat5e wires to (25) NMCI locations on the 3rd floor.
- (8) Install Caddy J-hooks above the ceiling to hold wiring.
- (9) Install Panduit deep outlet boxes to hold jacks in cubicles.
- (10) Install Caddy faceplate clips in sheetrock to hold jacks.
- (11) Install plywood on the wall to hold the equipment cabinets.
- (12) Install (1) 600B fiber shelf in each of the wall mount equipment cabinets that were installed in item (2) above.
- (13) Install (1) 110 wiring block in communications closet to put the telephone wiring on.
- (14) Test and label all wiring at both ends.
- (15) Test and label fiber at both ends.

B2406:

- (1) Install (2) Cat5e and (1) Cat3 wires to (3) NMCI locations.
- (2) Terminate Cat5e wiring on existing patch panel in the NMCl cabinet.
- (3) Terminate Cat3 wiring on existing 110 wiring block in telephone cabinet.
- (4) Install (3) dual Cat5e jacks and (3) dual Cat3 jacks.
- (5) Install (3) singlegang faceplates and place jacks into them.
- (6) Install (1) blank in each faceplate to fill up faceplate.
- (7) Test and label wiring at both ends.

The materials to be provided in conjunction with the above service are as follows:

- (1) 21,000 feet of Belden Data Twist Five plenum wire (CMP-0044BEL-5U-06) blue
- (2) 10,500 feet of Systimax Cat3 plenum wire (CMP-00424MAX-3U) white
- (3) 450 feet of corning 4-strand singlemode MIC fiber cable (370-948-SMODE-04)
- (4) 100 each Velcro ties
- (5) 78 each Ortronics blanks (148027)
- (6) 56 each Caddy J-hooks (184873)
- (7) 53 each Ortronics faceplates (148025)
- (8) 53 each Ortronics dual T568A/B Cat5e jacks (248945)
- (9) 40 each 14 feet Cat5e patch cord blue (MM14-AX5-06)
- (10) 40 each 14 feet Cat5e patch cord yellow (MM14-AX5-05)
- (11) 40 each 3 feet Cat5e patch cord blue (MM03-AX5-06)
- (12) 40 each 3 feet Cat5e patch cord blue (MM03-AX5-05)
- (13) 40 each 1 feet Cat5e patch cord blue (MM01-AX5-06)
- (14) 40 each 1 feet Cat5e patch cord blue (MM01-AX5-05)
- (15) 35 each Caddy faceplate clips (157703)
- (16) 28 each Ortronics USOC Cat3 jacks (148035)

- (17) 16 each Panduit deep outlet boxes (207082)
- (18) 14 each cool cure consumables (142172)
- (19) 12 each P2020A-C-125 singlemode ST connectors (157475)
- (20) 12 each A3000 singlemode ST couplers (184326))
- (21) 5 packs of 110C-4 connector (073039)
- (22) 2 each P2020C-C-125 multimode ST connector (170290)
- (23) 2 each C2000A-2 multimode ST couplers (088987)
- (24) 2 each Ortronics 48-port Cat5e patch panels (248952)
- (25) 2 each Ortronics 24-port Cat5e patch panel (248950)
- (26) 2 each Great Lakes wall mount cabinet (200609)
- (27) 2 each Great Lakes Fan assembly 7217WS (191088)
- (28) 2 each Great Lakes rack mount power strip 7219 (131905)
- (29) 2 each 3/4" x 4' x 8' sheet of plywood
- (30) 2 each Avaya 600B trough (192718)
- (31) 2 each Avaya 600B fiber she3lf (178260)
- (32) 2 each Avaya 600B cover plate (179391)
- (33) 2 each Avaya 600B 24-port panel (179380)
- (34) 1 each 110AW2-300 pair wiring block (154071)
- c. Schedule: The completion of this effort shall be 12 weeks after receipt of Fast Track approval (June 8, 2006).

6. SWR P203 6111 00

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install Cat6 and Cat3 wiring in room S180A and S180B to support networks and telephones in an area that has been converted to office space, as outlined in OAO proposal dated May 30, 2006. This work will include testing, labeling, and configuration documentation (red line drawings).

a. The contractor shall be responsible for performance of the following tasks:

OAO will provide the following services:

BOE-TEL will work:

- (1) Install (1) 84-port Visipatch panel and horizontal duct in room 345.
- (2) Install (2) Cat6 wires to (6) locations in room S180A & S180B.
- (3) Install (2) Cat6 green jacks at (6) locations for networks.
- (4) Install (2) Cat3 gray jacks at (6) locations for telephones.
- (5) Install (1) 4-hole singlegang faceplate at the (6) locations to hold the jacks in items (2) & (3) above.
- (6) Terminate Cat6 wiring on new Visipatch that was installed in item (1) above.
- (7) Install (1) Panduit outlet box in each cubicle to put jacks and faceplate.
- (8) Install Panduit raceway from ceiling down to cubicles to run wiring.
- (9) Install Caddy J-hooks in ceiling to hold wiring.
- (10) Test and label Cat6 and Cat 3 wiring at jack end and communications closet.
- (11) Provide ODIN with red line drawing showing jack locations and numbers.

The materials to be provided in conjunction with the above service are as follows:

BOE-TEL will purchase:

- (1) 3,000 feet of plenum Systimax 2071 level 7 wire (CMP-00424AVA-7U-04) green
- (2) 1,500 feet of plenum Systimax Cat3 (CMP-00424MAX-3U) white
- (3) 40 each Velcro ties
- (4) 30 each Caddy J-hooks (184873)
- (5) 12 each Systimax MGS400 T568A/B Cat6 jack (246746) green
- (6) 12 each Systimax M1BH Cat3 jack (240707) gray
- (7) 10 each 14-feet Cat6 patch cord green (MM14-AV7E-04)
- (8) 6 each Systimax M14L-262 faceplate (197613)
- (9) 6 each Systimax Visipatch distribution ring (532421)
- (10) 6 each 110C-4 connector (073039)
- (11) 6 each Panduit outlet boxes (201336)
- (12) 3 each Panduit LD10 raceway (131155)
- (13) 1 each Systimax 336 pair Visipatch (532210)
- (14) 1 each Systimax Visipatch horizontal duct (539650)
- (15) 1 pack of Premier black cable ties (739308)
- c. Schedule: The completion of this effort shall be 6 weeks after receipt of Fast Track approval (June 13, 2006).

7. SWR CC00 2006 03

The contractor shall provide the labor (including, but not limited to, engineering, configuration management, user coordination/scheduling, wiring/cabling (IEEE 802.3, EIA/TIA Building Wiring Standards, National Electric Code, and Fire Protection Code, as applicable), and equipment installation and materials necessary to install fiber from room 194H to room \$180HD in B1100 and install Cat5e wiring from room 128 to south hallway in B1002, as outlined in OAO proposal dated May 8, 2006. This work will include testing, labeling, and configuration documentation (red line drawings).

b. The contractor shall be responsible for performance of the following tasks:

OAO will provide the following services:

BOE-TEL will work:

B1100:

- Install (1) multimode 4-fiber fanout cable from room 194H to room S180HD.
- (2) Install (1) Panduit outlet box in both rooms.
- (3) Install (1) Ortronics 4-fiber insert in Panduit outlet box in both rooms.
- (4) Install (1) Ortronics faceplate in each Panduit outlet box to hold the Ortronics 4-fiber inserts.
- (5) Terminate fiber into ST connectors and place in Ortronics 4-fiber inserts in each room.
- (6) Test and label fiber cable at each end.
- (7) Provide ODIN with redline drawing showing route and fiber jack numbers.

B1002:

- (1) Install (1) Cat5e wire from room 128 out to south wall of hallway across from room 128.
- (2) Install (1) Caddy faceplate clip in south wall of hallway.
- (3) Install (1) singlegang faceplate in south wall of hallway.
- (4) Install (1) single T568A/B Cat5e jack in faceplate and put in Caddy faceplate clip in south wall of hallway.

- (5) Install (1) Panduit outlet box in room 128.
- (6) Install (1) single T568A/B Cat5e jack in (1) singlegang faceplate and put into Panduit outlet box in room 128.
- (7) Test and label Cat5e on both ends.

ODIN will work:

- (1) Install fiber jumpers in B1100, B1201 and B1002 to connect circuit all the way thru.
- (2) Install Cat5e patch cables from fiber transceivers to activate Cat5e jack in B1002 and leave hanging at switch end in B1100 for Keesler network technician.
- (3) Test circuit from room S180HD in B1100 to room 128 in B1002.

The materials to be provided in conjunction with the above service are as follows:

BOE-TEL will purchase:

B1100:

- (1) 180 feet of Corning multimode 4-fiber fanout cable (370-648-FDD12.0-04)
- (2) 8 each P2020C-C-125 multimode ST connectors (170290)
- (3) 8 each cool cure consumables (142172)
- (4) 2 each Panduit outlet boxes (207082)
- (5) 2 each Ortronics singlegang faceplates (148025)
- (6) 2 each Ortronics multimode 4-fiber inserts (173628)
- (7) 1 each 5 feet Cat5e patch cable (MM05-AX5-05) yellow
- (8) 1 each MIL-140C 10BaseT to 10Base-FL SC MMF (216685)
- (9) 1 each 2-meter multimode ST/ST fiber jumper (1390550
- (10) 1 each 2-meter multimode ST/SC fiber jumper (152012)

B1002:

- (1) 40 feet of Belden Data Twist Five (CMP-00424BEL-5U-06) blue
- (2) 2 each Ortronics single T568A/B Cat5e jack (248941)
- (3) 2 each singlegang faceplates (148025)
- (4) 1 each 5-feet Cat5e patch cables (MM05-AX5-05) yellow
- (5) 1 each Panduit outlet box (207082)
- (6) 1 each Caddy faceplate clip (157703)
- (7) 1 each 1-foot Cat5e patch cable (MM01-AX5-05) yellow
- (8) 1 each MIL-140C 10BaseT to 10Base-FL SC MMF (216685)
- (9) 1 each 2-meter multimode ST/ST fiber jumper (139055)
- (10) 1 each 1-meter multimode ST/ST fiber jumper (129350)
- (11) 1 each 5-meter multimode ST/SC fiber jumper (152014)

B1201:

- (1) 1 each 1-meter multimode ST/ST fiber jumper (129350)
- c. Schedule: The completion of this effort shall be 4 weeks after receipt of Fast Track approval (June 15, 2006).
- 8. Part II "Contract Administration Data", Item 4, is revised as indicated below to incorporate the increase of \$208,459.78 for these infrastructure upgrades:

Month/Mod	Description	Monthly Total	Actual Total To Date
Jun-06	Ordered Seats and Services	\$ 471,370.60	\$ 7,828,933.23
May-06	Catalog Services	\$ 48,647.30	\$ 304,254.04
May-06	Specialized Services	\$ -	\$ 271,498.41
Jun-06	Infrastructure upgrades	\$ 129,488.33	\$ 2,281,751.68
Jun-06	Fast Track Mods Authorized (but not incorporated by Mod) sub-total of ordered services	\$ 58,903.75 \$ 708,409.98	\$ 58,903.75 \$ 10,745,341.11
May-06	Less outage credit	\$ -	\$ -
Mar-06	Less retainage not earned	\$ -	\$ (5,035.82)
	TOTAL	\$ 708,409.98	\$ 10,740,305.29

- 9. Payment Schedule: Invoicing and Payment for this modification will be made in accordance with Master Contract NAS5-98144, FAR 52.212-4: Commercial Items (May 1997) (Modified), except for SWR NJ10 6FAQ 00, which will be paid according to the following schedule:
 - Phase I. Payment of \$10,263.85 shall be paid upon receipt of all material and verified by the Alternate DOCOTR or designee.
 - Phase II. Payment of \$7,205.67 after all Cat5e & Cat3 wiring has been installed along with the Cat5e patch panels and 110 wiring blocks for the Cat3 wiring and fiber placed and verified by Alternate DOCOTR or designee.
 - Phase III. Payment of \$7,205.66 after the Cat5e & Cat3 wiring and fiber has been terminated and tested and job verified by Alternate DOCOTR or designee.
- 10. Reporting requirements: The contractor shall provide monthly status reports to the SSC DOCOTR, with a copy to the DOCO. These reports shall include, as a minimum, installation progress, and potential problem areas.
- 11. In consideration of the modification agreed to herein as complete equitable adjustment for the changes set forth, the Contractor hereby releases the Government from any and all liability under this delivery order for further equitable adjustments attributable to such facts or circumstances giving rise to these changes.
- 12. All other terms and conditions of this Delivery Order remain unchanged and in full force and effect.